

HINTS

ON THE USE OF

THE CARBONATE OF SODA

AND

SODA WATER:

DESIGNED TO SHEW THEIR DEBILITATING
EFFECTS.

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LONDON:

PUBLISHED BY SIMPKIN, MARSHALL, & CO., STATIONERS'
COURT, LUDGATE HILL;
AND HATCHARD & SON, 187, PICCADILLY.

1836.

PRICE SIXPENCE.

* * * *These Observations were written for the purpose of being appended to the Author's book on the TREATMENT OF INDIGESTION, but from the evil they are designed to cure being a common one, it has been thought advisable to publish it also in a separate form.*

ENTERED AT STATIONERS' HALL.

J. Davy, Printer, 15, Queen Street, Seven Dials.

HINTS
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I AM glad to have this opportunity of warning the profession and the public against the frequent use of *Carbonate of Soda* and *Soda Water*. The present consumption of these articles in this kingdom is enormous, especially in the summer months; manufacturers of soda water are to be seen on every hand; chemists who a few years since bought the carbonate of soda by the pound, now purchase it by the hundred weight; scarcely a respectable person is to be found who does not use them, either in greater or smaller quantities—so that if they are articles unfriendly to the constitution, a warning in respect to their employment is of the first importance, and it is my endeavour in this sheet to shew, that they are very weakening to the stomach and the habit at large, and that their general and frequent use ought to be instantly abandoned.

For the sake of abbreviation I shall mention subsequently only the carbonate of soda, but all advanced in reference to that substance is likewise nearly applicable to soda water.

Formerly I was, like others, carried away by the general torrent of opinion and example in regard to the many virtues of soda, but circumstances occurred a few years since which led me to entertain doubts on this subject, and having since that period considered closely the nature of the operation of this article on the human frame, when taken internally, and observed the consequences of its frequent employment, I am now fully persuaded, that so far from being an innocent medicine, which may be taken freely and frequently by any one who suffers from stomachic acidity or weakness, or from thirst, or heat in summer, it is one capable of doing serious injury to the stomach and whole system, and ought therefore to be sparingly taken.

We will first glance at the nature and operation of this medicine, from which we gather sufficient reasons for inferring its enervating influence; and then I shall remark on what I have observed of its actual effects.

The *Carbonate of Soda* acts on the body as an antacid and diuretic. It neutralizes acidity in the stomach, and for this sole reason is frequently administered in indigestion and bilious affections. It does not appear to possess any other remedial or palliative influence whatever, except in its operation as a diuretic; and even in disorders of the urinary organs, its good effects are attributed by those who employ it most to its neutralizing power over the acid of the stomach, which is ordinarily very abundant in those complaints. In this case

the alkali is brought to the kidneys in the course of the circulation, it excites the vessels there to an increased action, and promotes the secretion of a larger proportion of watery fluid from the blood: It thus assists in lessening dropsical swellings. In common with other saline diuretics, it lowers the pulse, lessens fever, and undoubtedly whatever does this impairs the energy of the vital powers. Indeed, all saline diuretics are debilitating, and every patient under their operation is sensible of this.

The medical uses of the *Carbonate of Soda* are the same as those of the *Carbonate of Potash*, which is sometimes used with the same views as the former, namely, to neutralize acidity and relieve indigestion; but it is worthy of remark, that the carbonate of potash is the most frequent ingredient in febrifuge mixtures, and saline draughts, in conjunction with the citric or tartaric acid:—it is in common use in the most acute fevers, because we can depend upon it for aid in lessening the frequency and force of the pulse, and lowering the general excessive action; and so certain is this effect that no person in ordinary health can take it for a week without feeling its reducing influence. It is not so pleasant as the carbonate of soda, and is therefore not so often employed on ordinary occasions, but their action is the same precisely, and the one is scarcely less reducing than the other.

Another circumstance which shows the sedative and lowering influence of the *Carbonate of Soda* is the excellent effects it is said to have produced in

certain pulmonary affections attended with cough, and symptoms of high irritation and inflammation; for example, in inflammation of the lungs accompanied with an oppressive collection of slime in these organs, in which Mascagni recommends it as efficacious, and in Hooping-Cough, in which disease it was highly spoken of by Dr. Pearson. These are disorders peremptorily requiring remedies which lessen vascular action, and lower the vital force, and in their acute stages the *Carbonate of Soda* is recommended as of great service. I have not tried this article in Hooping-cough, because there are better remedies, but the testimony of the profession generally is in favor of its virtues in the acute stage of the disease, and we are certain it could not act here in relieving the patient, but by its operation as a diuretic and sedative.

Then how is it that this article is so constantly recommended to all persons with weak stomachs, and suffering from general debility? Can this fail to be extensively injurious? I firmly believe the practice is one direct cause of the increasing prevalence of indigestion and nervousness, and indirectly it has an influence in the aggravation of many chronic complaints. Every medical man is aware of its common use in prescriptions; to so unreasonable and preposterous a height has this grown, that we can now hardly read a prescription for any bitter mixture but the *Carbonate of Soda* is introduced as a principal ingredient;—if powders are prescribed, this famous medicine must bear its part in them, or

it seems to be considered they would lose their efficacy;—if the bark is given it must be with soda. Thus the most valuable bitters and tonics are daily rendered either useless or worse than useless, for very frequently, if not ordinarily, in those cases which call for this class of remedies soda is wholly inadmissible. I lately saw a gentleman of a weakly habit and a great dyspeptic, who had taken bark and soda together by prescription from an eminent surgeon for many weeks, and at the end of the time was far worse than when he began. We found the bark agreed well with him, but the conjunction of the soda more than neutralized its virtues.

A dyspeptic stomach,—a stomach strongly and ordinarily disposed to form acid from its principal contents, is an enfeebled organ, and should be treated as such. Many professional men say soda “in small doses facilitates digestion, and restores in a very short time the functions of the stomach;” but this may be safely denied, if it is meant that it affords real relief. It may sometimes afford a spurious kind of help, but it does not facilitate digestion, or restore the functions of a depraved stomach. The benefit derived, if any, is like that obtained by persons in general from blood-letting prescribed to cure head-ache; it relieves them for the moment, to help the disorder to return with a two-fold or a ten-fold severity. Who in his senses would not deprecate such a relief?

Scarcely any medicine is more used now, or I should rather say abused than this. Some of our

best writers on *Materia Medica* assert it is not injurious even in its continued use, and that the tonic powers of the carbonic acid, which is extricated in the stomach, prevents any unpleasant effects from the alkali, but this is mere supposition, and is contrary to fact. The carbonic acid inflates the stomach, which is not a likely way of invigorating it, and that it does more than this is not at all made out. The carbonate of soda has been asserted by others to be injurious, and some physicians have thought it necessary to meet the charge in the way just adverted to.

Its first effect, if acid be present, is to relieve existing sensations of acidity, weight and uneasiness in the stomach, which it does by neutralizing the acid, and thus removing an offending article; but its subsequent effect is *certainly* and *decidedly* that of a debilitating agent. In some instances it will afford very little present relief, and in many others the patients in attending to their sensations find it sensibly disagrees. Some persons cannot take it even in beer (to neutralize the acidity of which it is often used), without feeling it to disagree; others in whom it appears to agree very well in the beginning, have soon found its injurious tendency. For example, it has been felt so to weaken the stomach as to pave the way for the greater frequency of acidity there, and of headache, for which indeed it had been used as a remedy, and which for a while it seemed to relieve; but the patient found to his cost the remedy was

worse than the disease, inasmuch as other and better remedies could be found for the sickness and head-ache, but none could be found for them if the use of soda had been persisted in. This I have proved in my own person. So greatly was I deceived some years since by the testimony ordinarily given by the profession in favor of soda and soda water, that I employed it freely for the relief of indigestion, and sick head-ache; it usually relieved me sensibly at the time, but there followed so great an increase of stomachic weakness, and the attacks of head-ache were so much more frequent, that I was naturally led to search after the cause of this unexpected change, and soon found that my supposed great friend was in reality a concealed and powerful enemy. The effects of a discontinuance of this practice were satisfactory, and proved that I had not laid my suspicions in the wrong place. To this day, if from the pressure of stomachic uneasiness, (and I never do it but from the great pressure of the moment,) I unadvisedly have recourse to a glass of soda water for present relief, I find its weakening influence.

A very respectable chemist in London, well known at the west end of town, brought himself into a deplorable state of health, before he was aware either of the cause of his symptoms, or the extent to which they tended; at length he found that his very free use of the carbonate of soda and soda water was the real source of his malady, and

he has never failed, on proper occasions, to speak of their debilitating effects.

These brief remarks are appended to this volume with the hope that very many will be induced to abandon the injurious practice of taking soda and soda water freely. In full habits, where there is much strength, they may be occasionally taken with advantage, but scarcely in other less vigorous states of the constitution. I think soda ought never to be used in the tea-pot, and very seldom in beer; and I confidently anticipate an improvement in medical practice by its being discarded from general use, a most desirable event, and which, if my life be mercifully prolonged, I cannot but expect to witness.

Many persons will no doubt enquire, what they ought to use in order to neutralize acidity, as soda is generally to be avoided, and I answer—The *Alkaline Solution* (which is prepared in a very superior manner by Watts, Chemist, Strand,) or *Ammonia*. Half a tea-spoonful or more of the Alkaline Solution may be taken in half a tea-cupful of milk and water, or water, and with excellent effects: or 15 or 20 drops of the *pure Water of Ammonia* may be tried in the same way. But the attention should be chiefly directed to the removal of the cause of acidity, which will require an alterative and invigorating mode of treatment, the details of which we have given in other publications.

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June, 1836.